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09/859,660	05/16/2001	Guy Eden	SLA 1014	3934

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EXAMINER	
REFAI, RAMSEY	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/859,660	EDEN, GUY	
	Examiner	Art Unit	
	Ramsey Refai	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-16,18-20,23,24 and 26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-16,18-20,23,24 and 26* is/are rejected.

7)☒ Claim(s) *15 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Responsive to Amendment received on January 4, 2006. Claims 1-6, 8-16, 18-20, 23-24, and 26 have been amended. Claim 1-6, 8-20, and 22-26 remain pending examination.

Claim Objections

1. Claim 15 is objected to because of the following informalities: In line 9, the term "to5" will be taken as -to-. Also in claim 15, line 8, the term "communications" will be taken as –communicating-.

Claim 24 is objected to because of the following informalities: In line 2, the letter "a" before "the" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1-6, 8-20, and 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the term "network-connected device". It is not clear if this device is a device from the group of "the network-connected devices" previously introduced in the preamble. If so, the term should be rewritten in better form to convey such position (i.e. *a network-connected device from the network-connected devices*).

Claim 15 recites the term "at least one device", which is indefinite because it is not clear what this term is referring to. Clarification is requested.

Claims 18-26 refer to *a first network-connected device* and *a second network-connected device.* It's not clear whether these devices are devices from among the *network-connected devices* previously recited. Clarification is requested.

The following terms lack proper antecedent basis:

- In claim 1, the terms " network-connected devices" , "the GUI", "the queries"
- In claim 2, the term "the GUI"
- In claim 3, the term "the GUI"
- In claim 4, the terms "updating the GUI representation", "the GUI representation of the first network-connected device"
- In claim 5, the terms "updating the GUI representation", "the GUI representation of the second network-connected device"
- In claim 9, the terms "changing the GUI representation of the first network-connected device", "the GUI representation"
- In claim 10, the terms "maintaining the GUI representation", "the GUI representation of the second network-connected device"
- In claim 12, the term "the GUI"
- In claim 13, the terms "the network-connected devices", "the GUI representation of the network-connected device"
- In claim 14, the term "modifying the GUI representation"
- In claim 15, the term "network-connected devices", "the GUI representation"
- In claim 18, the term "the GUI representation of the first network-connected device"
- In claim 20, the terms "the GUI representation of the second network-connected device", "each network device query"
- In claim 23, the terms "the querying device GUI", "the representation of the first network-connected device"
- In claim 24, the terms "a query reply", "the querying device GUI", "the representation of the second network-connected device"

The Applicant is advised to carefully review all claims for all indefinite limitations . For example, claim 1 has been amended to now recite *"building a **graphical user interface representation** of network-connected devices"* which is different than previously presented limitation of *-**building a graphical user interface** for representing the availability of known network-connected devices-*. The current claim limitation is directed to **building a representation** and **not the building of a GUI** as previously claimed. Therefore, the claims that depend on the currently amended claim 1 are indefinite for their reference to a GUI since a GUI has not been claimed. Another example is the claims' reference to several different devices without any consistency to their function or relevance. The claims refer to "network-connected devices", "at least one device", "a first network-connected device", and "a second network-connected device". For example, it is not clear if the first network-connected device and the second network-connected device are part of the group of "network-connected devices". If that is the case, the claims should reflect that feature by rewriting the claims accordingly (i.e. *a first network-connected device from the network-connected devices*).

Claims that depend on the above rejected claims are also rejected under the same rationale.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 12-19, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Carcerano et al (U.S. Patent No. 6,308,205).

5. As per claims 1 and 15, Carcerano et al teach a method for a querying device to determine the availability of network-connected devices, the method comprising:

at a querying device, building a graphical user interface (GUI) representation of network-connected devices prior to sending a query to network connected devices **(column 2, lines 46-54, column 11, lines 38-51, column 14, lines 47-67; data to fill a template, which is used to construct the interface, is obtained from a database);**

following the building of the GUI, sending a query from the querying device to the network-connected devices **(Figure 9, column 15, line 42-column 16, line 3),**

in response to the queries, updating the GUI representation of the network-connected devices **(abstract).**

6. As per claims 2 and 16, Carcerano et al teach a method further comprising:

at a querying device user interface, issuing a network discovery **(column 15, line 42-column 16, line 3)**; and

building the GUI includes building the GUI in real-time, in response to querying device user interface discovery command **(column 2, lines 46-54)**.

7. As per claims 3 and 17, Carcerano et al teach: wherein building the GUI includes initially representing each of the network-connected devices as unavailable **(column 15, lines 42-48; user needs to click on a device name in order to view status)**.

8. As per claims 4 and 18, Carcerano et al teach wherein sending the query to the network-connected devices includes:

spawning a thread from the querying device to query each of the network-connected devices ; receiving a query reply from a first network connected device; and wherein updating the GUI representation includes changing the GUI representation of the first network-connected device to available **(column 2, lines 12-26, column 14, lines 38-66)**.

9. As per claims 5 and 19, Carcerano et al teach:

failing to receive a query reply from a second network-connected device; and wherein updating the GUI representation includes maintaining the GUI representation of the second network-connected device as unavailable **(column 2, lines 12-26, column 14, lines 38-66)**.

10. As per claim 12, Carcerano et al teach accepting a periodic refresh command; and wherein building the GUI representation of network-connected devices includes refreshing the GUI in response to a refresh command **(Figure 8A, column 13, line 58-column 14, line 30).**

11. As per claim 13, Carcerano et al teach a method of building a graphical user interface (GUI) representing the availability of the network-connected devices independent of system timeouts, the method comprising;

from a querying device, building a graphical user interface (GUI) representing the availability of known network-connected devices **(column 2, lines 46-54, column 11, lines 38-51, column 14, lines 47-67; data to fill a template, which is used to construct the interface is obtained from a database)**;

initially representing the network-connected devices as unavailable **(column 2, lines 46-54, column 11, lines 38-51, column 14, lines 47-67; data on device status is stored in database and is loaded into interface as a template)** and

modifying the GUI to represent available network devices in response to communicating with those particular network-connected devices **(Figure 9, column 15, line 42-column 16, line 3)**.

12. As per claim 14, Carcerano et al teach: maintaining the GUI to represent unavailable network devices in response to not communicating with those particular network-connected devices **(Figure 9, column 15, line 42-column 16, line 3; queries are sent to update status).**

13. As per claim 25, Carcerano et al teach issuing commands requesting the availability of the network-connected devices includes requesting the availability of network-connected devices selected from the group including printers, copiers, scanners, faxes, automatic teller machines (ATMs), remote

sensors, virtual private network (VPN) devices, satellite devices, and other computers **(column 1, lines 17-29)**.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 6, 8-11, 20, 22-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carcerano et al in view of AAPA.

16. As per claims 6 and 20, Carcerano et al fail to explicitly teach: accepting a timeout period for the second network-connected device query; and if the timeout period expires before a query reply is received, determining that the second network-connected device is unavailable.

17. However, AAPA teach accepting a timeout period for each network connected device query; and if the timeout period expires before a query reply is received, determining that the particular network connected device is unavailable **(paragraph [0005-0007], Figure 2).** It would have been obvious to one of the ordinary skill in the art at the time of the Applicant's invention to combine the teachings of Carcerano et al and AAPA because doing so would provide an efficient way of querying multiples devices by setting up time limits for each query in order limit the query of device and not waste time if the device is unavailable.

18. As per claims 8 and 22, Carcerano et al teach spawning a thread from the querying device to the network-connected devices includes using a function selected from the group including a Sockets connect function, a ping function, and an NSLookup function **(column 2, lines 13-15; polling)**.

19. As per claims 9, 10, 23, and 24, Carcerano et al fail to teach spawning a thread from the querying device to the network-connected devices includes requesting a True/False answer, wherein changing the GUI representation of the first network-connected device to available in response to a True Answer and returning a False answer if the timeout periods expires before a query reply is received and maintaining the GUI representation of the particular network device as unavailable in response to the False answer.

20. However, AAPA teach spawning a thread from the querying device to query each of the network-connected devices includes requesting a True/False answer, wherein changing the GUI representation of that particular network device to available in response to a True Answer and returning a False answer if the timeout period expires before a query reply is received and maintaining the GUI representation of the particular network device as unavailable in response to the False answer **(Figure 2, paragraph [0005-0007])**. It would have been obvious to one of the ordinary skill in the art at the time of the Applicant's invention to combine the teachings of Carcerano et al and AAPA because doing so would provide a method of querying devices for status information by labeling a device as available if the device replies to a query and unavailable if the device fails to respond.

21. As per claims 11, Carcerano et al teach spawning a thread from the querying device to the network-connected devices includes requesting the availability of the network-connected devices includes requesting the availability of network-connected devices selected from the group including printers, copiers, scanners, faxes, automatic teller machines (ATMs), remote sensors, virtual private network (VPN) devices, satellite devices, and other computers **(column 1, lines 17-29)**.

22. As per claim 26, Carcerano et al teach accepting a periodic refresh command; and wherein building the GUI representing the network-connected devices includes refreshing the GUI in response to the refresh rate value **(Figure 8A, column 13, line 58-column 14, line 30).**

Response to Arguments

23. Applicant's arguments filed January 4, 2006 have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance that:

Argument A:

Carcerano does not mention a GUI, or any terms similar to GUI.

Argument B:

Carcerano does not build his browser interface prior to sending device status inquires.

Argument C:

Motivation to combine references cannot be based upon the claimed invention limitations (hindsight)

- In response to:

Argument A:

Examiner respectfully disagrees. Microsoft Computer Dictionary, 5th Edition defines a graphical user interface as "*A visual computer environment that represents programs, files, and options with graphical images, such as icons, menus, and dialog boxes on the screen. The user can select and activate these options by pointing and clicking with a mouse or, often with the keyboard.*" Although the exact term "GUI" is not used, a graphical user interface is. Carcerano teaches a browser interface that contains files, options, icons, menus, etc, that the user can select and activate by pointing and clicking with a mouse or keyboard to operate, in order obtain status of, and monitor network devices. Therefore, Carcerano meets the scope of the claimed limitations. **(See Figures 6 and 7).**

Argument B:

Examiner respectfully disagrees. Carcerano teach that data to fill a template, which is used to construct the interface, is obtained from a database. Therefore Carcerano meets the scope of the claimed limitation **(See column 2, lines 46-54, column 11, lines 38-51, column 14, lines 47-67).**

Argument C:

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2152

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER